IN THE CLAIMS

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1. (Currently Amended) A method for reducing profile distortion in semiconductor fabrication using deep ultraviolet lithography without roughening a semiconductor substrate surface, comprising:

providing a semiconductor substrate comprising a film comprising silicon-nitride;

treating the film in a vacuum of about 3.0-6.5 Torr, for a time of about 10 seconds to about 5 minutes, and in an atmosphere free of argon comprising oxygen plasma as the gas present in the greatest concentration wherein the oxygen plasma flow rate is at least about 300 sccm oxygen and the atmosphere renders the substrate resistant to profile distortion and roughening to make a treated substrate;

applying a resist to the treated substrate; [[and]]

patterning the resist; and

treating the resist with UV light.

2. (Original) The method of claim 1 and further including exposing oxygen gas to an energy source generating about 150-900 watts in order to make the oxygen plasma.

3. (Original) The method of claim 2 wherein the oxygen plasma is made by electromagnetic excitation of oxygen gas by electrodes that are about 400 to 600 mils apart.

4. (Cancelled)

5. (Original) The method of claim 2 wherein the oxygen plasma is made by an exposure of oxygen gas to an energy source that is RF energy.

6. (Original) The method of claim 2 wherein the oxygen plasma is made by an exposure of oxygen gas to an energy source that is microwave energy.

7. (Original) The method of claim 1 wherein the reduced profile distortion is footing.

8. (Original) The method of claim 1 wherein the reduced profile distortion is undercutting.

9. (Original) The method of claim 1 and further including removing the resist from the silicon nitride film with reduced profile distortion.

10. (Original) The method of claim 1 wherein the oxygen flow rate is not greater than about 2000 sccm.

11. (Original) The method of claim 1 and further comprising adding an inert gas to the oxygen gas.

12-20. (Cancelled)

21. (Currently Amended) A method for making a microcircuit having a uniform symmetry, using deep ultraviolet lithography, without roughening a semiconductor substrate surface, comprising:

providing a semiconductor substrate comprising a film comprising silicon-nitride;

treating the film in a vacuum of about 3.0-6.5 Torr, for a time of about 10 seconds to about 5 minutes, and in an atmosphere consisting essentially of oxygen plasma as the gas present in the greatest concentration wherein the oxygen plasma flow rate is at least about 300 sccm oxygen to about 2000 sccm and helium in a concentration of about 400 to 1000 sccm and the atmosphere renders the substrate resistant to profile distortion and roughening to make a treated substrate;

applying a resist to the treated substrate; [[and]]

treating the resist with UV light; and

patterning the resist to form a microcircuit.

22. (Previously Presented) The method of claim 21 and further including exposing oxygen gas to an energy source generating about 150-900 watts in order to make the oxygen plasma.

23. (Previously Presented) The method of claim 21 wherein the oxygen plasma is made by electromagnetic excitation of oxygen gas by electrodes that are about 400 to 600 mils apart.

24. (Previously Presented) The method of claim 21 wherein the oxygen plasma is made by an exposure of oxygen gas to an energy source that is RF energy.

25. (Previously Presented) The method of claim 21 wherein the oxygen plasma is made by an exposure of oxygen gas to an energy source that is microwave energy.

26. (Previously Presented) The method of claim 21 wherein the reduced profile distortion is footing.

27. (Previously Presented) The method of claim 21 wherein the reduced profile distortion is undercutting.

28. (Currently Amended) The method of claim 21 and further including removing the resist from the silicon nitride film with reduced profile distortion.

29. (Cancelled)

30. (Cancelled)

31. (Previously Presented) A method for reducing losses in wafer manufacturing by reducing profile distortion in substrate fabrication without roughening, when using deep ultraviolet lithography a semiconductor substrate surface, comprising:

providing a semiconductor substrate comprising a film comprising silicon-nitride;

treating the film in a vacuum of about 3.0-6.5 Torr, for a time of about 10 seconds to about 5 minutes, and in an atmosphere consisting essentially of oxygen plasma as the gas present in the greatest concentration wherein the oxygen plasma flow rate is at least about 300 sccm oxygen to about 2000 sccm and helium in a concentration of about 400 to 1000 sccm and the atmosphere renders the substrate resistant to profile distortion and roughening to make a treated substrate;

applying a resist to the treated substrate; [[and]]

patterning the resist; and

treating the resist with UV light.

32. (Previously Presented) The method of claim 31and further including exposing oxygen gas to an energy source generating about 150-900 watts in order to make the oxygen plasma.

33. (Previously Presented) The method of claim 31 wherein the oxygen plasma is made by electromagnetic excitation of oxygen gas by electrodes that are about 400 to 600 mils apart.

34. (Previously Presented) The method of claim 31 wherein the oxygen plasma is made by an exposure of oxygen gas to an energy source that is RF energy.

35. (Previously Presented) The method of claim 31 wherein the oxygen plasma is made by an exposure of oxygen gas to an energy source that is microwave energy.

36. (Previously Presented) The method of claim 31 wherein the reduced profile distortion is footing.

37. (Previously Presented) The method of claim 31 wherein the reduced profile distortion is undercutting.

38. (Previously Presented) The method of claim 31 and further including removing the resist from the silicon nitride film with reduced profile distortion.

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39. (Cancelled)

40. (Cancelled)